

7. *Ptychomitrium sinense* (Mitt.) Jaeg.      zhong-hua suo-ye xian

Ber. Thätigk. St. Gallischen Naturwiss. Ges. 1872–73: 104. 1874. *Glyphomitrium sinense* Mitt., J. Proc. Linn. Soc., Bot. 8: 149. 1864. Syntypes. China: Jiangsu (Kiang-si), Nan-kong-foo, *Alexander s.n.* (NY); Japan: “*Oldham*” (NY).

*Ptychomitrium microcarpum* (C. Müll.) Par., Ind. Bryol. 1058. 1898. *Ptychomitrium sinense* var. *microcarpum* (C. Müll.) Card. ex Broth., Nat. Pflanzenfam. (ed. 2) 11: 9. 1925. *Brachysteleum microcarpum* C. Müll., Nuovo Giorn. Bot. Ital. N. Sér. 3: 107. 1896. Syntypes. China: Shaanxi (Schen-si), In-kia-po, *Giraldi s.n.* July 1894 (H); Si-ku-tziu-san, *Giraldi s.n.*, July 1894 (H).

*Ptychomitrium sinense* (Mitt.) Jaeg. var. *humile* Nog., J. Hattori Bot. Lab. 12: 10. 1954.

*Plants* small, (0.2–)0.5–1.1 cm high, green to yellowish green above, dark green to brown below, in dense cushions or tufts. *Stems* simple or sparsely branched; central strand well developed. *Leaves* 2.0–4.1 mm long, strongly incurved and somewhat twisted when dry, erect-spreading when moist, oblong-lanceolate from a short oblong base, concave above, bluntly acute at the apex; margins erect, entire; costa single, strong, ending just below the apex; upper leaf cells often obscure, rounded quadrate to subquadrate, 8–14 µm wide, with slightly thickened walls; basal cells short-rectangular to rectangular, 13–26 µm × 8–14(–18) µm, hyaline, thin-walled. *Autoicous*. *Perigonia* often found below perichaetia. *Perichaetial leaves* similar to vegetative leaves, slightly smaller. *Setae* straight, yellowish brown, variable in length, (1.5–)2–9 mm long; capsules erect, ovoid, oblong-ovoid to oblong-ellipsoid, 1.0–2.5 mm long, yellow or orange-brown; annuli well developed, consisting of two rows of thick-walled cells; peristome teeth short, yellow, lanceolate, obtuse, forked nearly to the base, 0.13–0.23 mm long, densely papillose; opercula with a long, erect beak. *Calyptrae* mitrate, covering almost entire capsule, longitudinally plicate, lobed at the base. *Spores* yellowish green, spherical, 13–18 µm in diameter, finely papillose.